Assignment 1 64060

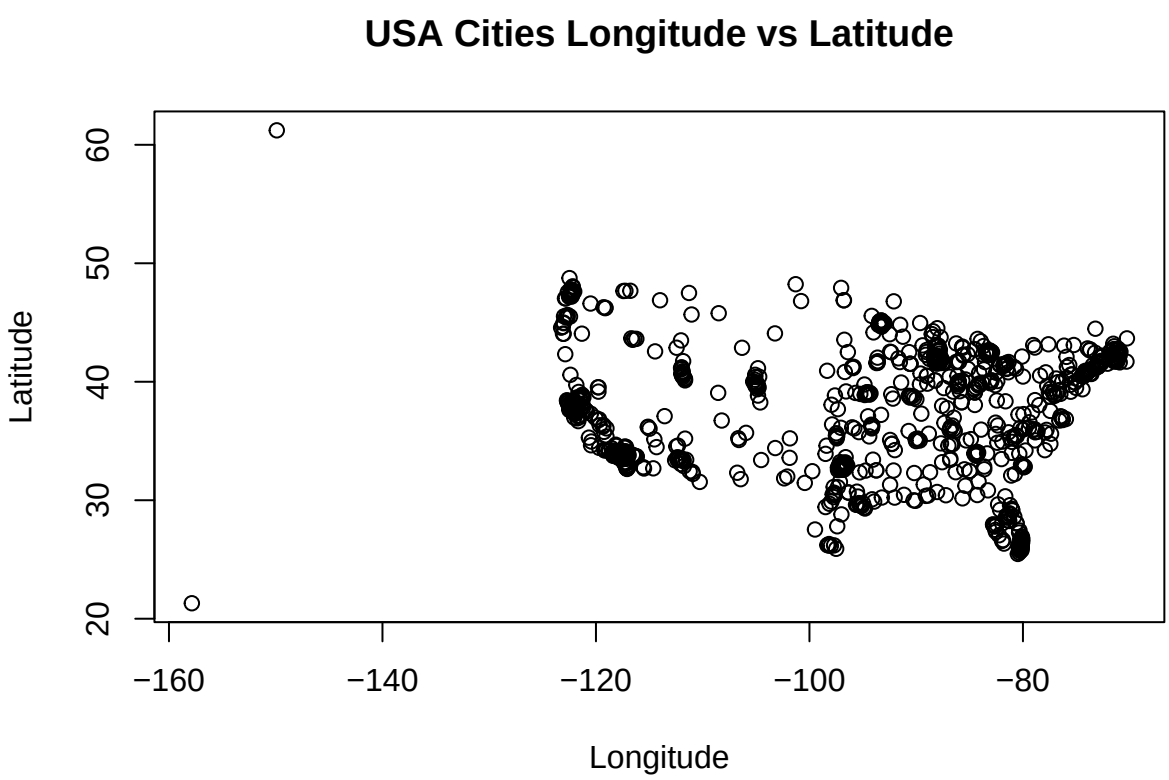
Nate Cvelbar

2023-09-11

```
#Assignment 1
#Nate Cvelbar
#BA-64060

#File taken online from this location: https://github.com/plotly/datasets/blob/master/us-cities-top-1k.
#Loading the dataset
cities=read.csv('C:/Users/Owner/Documents/us-cities-top-1k.csv')

#Showing descriptive statistics
summary(cities)
```

```
##      City               State              Population           lat
##  Length:1000        Length:1000        Min.   :  36877   Min.   :21.31
##  Class :character   Class :character   1st Qu.:  49698   1st Qu.:33.75
##  Mode  :character   Mode  :character   Median :  68207   Median :37.77
##                                        Mean   : 131132   Mean   :37.34
##                                        3rd Qu.: 109885   3rd Qu.:41.62
##                                        Max.   :8405837   Max.   :61.22
##       lon
##  Min.   :-157.86
##  1st Qu.:-116.96
##  Median : -93.24
##  Mean   : -96.48
##  3rd Qu.: -82.17
##  Max.   : -70.26
```

```
#Changing column name, transforming the data to have population be in thousands, and rounding to whole
colnames(cities)[3] <- "Population (thousands)"
cities[3]=cities[3]/1000
cities$`Population (thousands)`=round(cities$`Population (thousands)`, 0)

#scatter plot latitude vs longitude of USA cities
plot(cities$`lon`, cities$lat,main = 'USA Cities Longitude vs Latitude',xlab='Longitude',ylab = 'Latitu
```


USA Cities Longitude vs Latitude
Latitude
20
30
40
50
60
−160
−140
−120
−100
−80
Longitude